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Conditions on Object Agreement in Ruwund (Bantu)*

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Languages that have object agreement often place complex conditions on what sorts of objects can trigger agreement. These conditions involve a wide range of factors including specificity, animacy, person, and number (Comrie 1981, Croft 1988, 1990). For example, the Austronesian language Palauan allows objects to agree only if they are [+human] or [+specific, +singular] (Josephs 1975, Georgopoulos 1991, Woolford 1995). It is known from the typological literature that the features associated with object agreement cross-linguistically are those at the high end of one or more of the following hierarchies, often referred to collectively as the animacy or topicality hierarchy (Givon 1976, Comrie 1981, Croft 1988, 1990, Bentley 1994):

- (1) Hierarchies Relevant to Object Agreement:
 - a. Specificity Hierarchy: specific > nonspecific
 - b. Animacy Hierarchy: human > animate > inanimate
 - c. Number Hierarchy: singular > plural
 - d. Person Hierarchy: first person > second person > third person

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Current theories of agreement (e.g. Chomsky 1995) do not predict the extent of the typological variation that occurs. Current theory can incorporate simple language-particular restrictions on object agreement by treating them as gaps in the inventory of agreement morphemes. For example, in a language where only human objects trigger agreement, one could claim that the language only has (overt) agreement morphemes for [+human] forms. Non-human objects would either not trigger agreement at all or would trigger only null agreement. The complexity of the conditions on object agreement that occur cross-linguistically, however, far exceeds the predictions of such an approach. In Palauan, for example, where human objects do trigger object agreement, objects need not be human to trigger agreement; non-human objects also trigger agreement if they are specific and singular. The problem that languages like Palauan raise for any sort of features-on-agreement approach is that there is no one feature or set of features that an object must have in order to trigger (overt) agreement. Instead, an object may have any one of several distinct bundles of features and still trigger agreement.

This problem is even clearer in Ruwund, the language that is the focus of this paper.¹ No single feature is ever sufficient to trigger object agreement. Instead, object agreement occurs when an object has any one of four different combinations of features: [+animate, +specific], [+specific, +focus], [+animate, +goal], or [+animate, +benefactive/malefactive]. To deal with the Ruwund data in terms of features on agreement morphemes and gaps in the morpheme inventory, one would have to claim that this language has four different series of agreement morphemes (which just happen to look exactly alike), one corresponding to each feature bundle associated with object agreement.

An alternate approach proposed in Woolford 1995 maintains the simple idea that any object that moves to the structural position associated with object agreement (assumed here to be Spec Agr-O) will trigger object agreement. No gaps in the morpheme inventory are required to account for the conditions on object agreement in Palauan or in Ruwund (although, of course, gaps in morpheme inventories are not ruled out in principle). Instead, the reason that not all objects trigger agreement in these languages is that *not all objects move to the object agreement position*.

The basic idea underlying this approach, that objects with different semantic features may occupy different positions in the syntactic tree (inside versus outside the VP), comes from Diesing 1992. However, Diesing's actual proposal, that [+specific] NPs are universally excluded from VP-internal positions, is difficult to maintain in the face of languages like Palauan (where specific objects remain inside the VP, unless they are also singular or human) or Ruwund (where specific objects remain inside the VP, unless they are also animate or focused). To deal with problems of this sort, Comrie 1981 and Diesing and Jelinek 1993 suggest that what counts as specific can vary from language to language. In order to avoid redefining specificity for different languages, however, and in order to

¹Ruwund is a Bantu language spoken in Zaire and Angola. All information about Ruwund in this paper comes from Nash 1992.

capture the fact that features other than specificity also correlate with syntactic positions inside and outside the VP, it is proposed in Woolford 1995 that there is a family of related principles that exclude NPs from VP-internal positions when they have features (or combination of features) high on the animacy hierarchies. These principles are called *exclusion principles*.

The role that exclusion principles play in syntax and the reason that they are not 'active' in all languages can best be understood by drawing a parallel between syntax and phonology. The key idea is that, just as languages may restrict the features that consonants inside the coda of a syllable can have, languages may restrict the features that NPs inside the VP can have. *Ideally, features of coda consonants should be as high on the sonority hierarchy as possible (Selkirk 1984, Clements 1992, Prince and Smolensky 1993) and in a parallel fashion, features of VP-internal NPs should be as low on the animacy hierarchy as possible.* Moreover, just as the ideal form of syllables is often not achieved in particular languages, due to the opposing effects of other, more highly ranked principles (Prince and Smolensky 1993), the same is true for clauses.

In syntax, the effect of exclusion principles, which drive object movement, is opposed by the economy principle Avoid Movement (Chomsky 1995). If a particular exclusion principle is ranked below Avoid Movement, the grammar will select the derivation obeying the economy principle, even if that derivation violates that exclusion principle. As a result, that exclusion principle will (appear to) be inactive in that language. On the other hand, if an exclusion principle is ranked above Avoid Movement, that exclusion principle must be obeyed, even if that means violating the economy principle. Thus, it is the exclusion principles ranked above the economy principles that are active in a language.

The reason that several different or even disjoint bundles of features may be associated with object agreement in a particular language is that several different exclusion principles may be active in a particular language. Each exclusion principle will force objects with a particular feature or bundle of features out of the VP.

The present paper extends the exclusion principle approach, developed in Woolford 1995 for Palauan, to account for the complex set of restrictions on object agreement in Ruwund, a language unrelated to Palauan. The Ruwund data show that the range of features that exclusion principles can refer to is slightly larger than what is described above in (1). Although the fact that [+specific, +animate] objects obligatorily trigger object agreement in Ruwund can be accommodated without any additional features, exclusion principles in Ruwund must be able to refer to the thematic role of an object as well as whether or not that object is focused. Thus, Ruwund shows us that the list of relevant hierarchies in (1) must be expanded to also include the thematic and focus hierarchies.

(1) e. Thematic Hierarchy: agent > benefactive > goal > theme

f. Focus Hierarchy: [+focus] > [-focus]

This paper is organized as follows. Examples illustrating the various conditions that produce object agreement in Ruwund are presented in section one. The generalizations that characterize these data are listed in section two and the proposed analysis is presented in detail in section three. Section four is the conclusion.

1. Data Patterns

This section presents examples illustrating the complex object agreement patterns in Ruwund. The behavior of single objects with respect to agreement is examined first, followed by a discussion of double object constructions. The generalizations that underlie these facts are presented in section two.

1.1 Single Object Constructions

In single object constructions, the question of whether an object will trigger object agreement or not depends on several interacting factors, including animacy, specificity, θ -role, and focus.

1.1.1 Animate Objects

For animate objects, the absence of object agreement indicates that the object is non-specific, while the presence of object agreement (OAGR) indicates that the object is specific (Nash 1992, p. 565).²

- (2) a. ku+kimb muntu
INF+look-for person
to look for a [any] person

- b. ku+mu+kimb muntu
INF+OAGR+look-for person
to look for a/the person (speaker has a particular person in mind)
(Nash 1992, p. 565)

- (3) a. ku+kàt atûbu
INF+like dogs
to like dogs [in general]

²Nash 1992 shows that *animacy*, rather than *humanness* or Class 1/2 is the feature that is relevant for Ruwund object agreement. Although Nash uses the term *definite*, rather than *specific*, his discussion and translations of examples like (2) suggest that the relevant feature is actually specificity. For a discussion of the difference between definiteness and specificity, see Enç 1991.

- b. ku+yi+kât atûbu
 INF+OAGR+like dogs
 to like the dogs (speaker has some particular dogs in mind)
 (Nash 1992, p. 565)

An exception to this generalization is a class of verbs that normally take only animate objects including *cure*, *help*, and *marry*. The objects of such verbs always trigger agreement, regardless of whether or not they are specific (Nash 1992, p. 960). It will be suggested below that this exceptional behavior may have to do with the θ -role that such verbs assign (goal rather than theme).

- (4) ku+yi+kwaash âan
 INF+OAGR+help children
 to help children (Nash 1992, p. 960)

1.1.2 Inanimate Objects

For inanimate objects, the absence of object agreement does not provide any information about the specificity of the object. Inanimate objects need not trigger object agreement, even if they are specific (Nash 1992, p. 565).

- (5) ku+land malong
 INF+buy plates
 to buy some/the plates (Nash 1992, p. 565)

Inanimate objects can trigger object agreement, but when they do, it indicates both that the object is specific and that there is an increase in the degree of focus on the object (Nash 1992).

- (6) ku+ma+land malong
 INF+OAGR+buy plates
 to buy *the plates* (Nash 1992, p. 565)

1.2 Applied Single Objects

The situation changes somewhat when there is an applicative morpheme present. Agreement is required with all animate applied objects (except possessors), "whether definite or indefinite, focused or non-focused" (Nash 1992, p. 961).

1.2.1 Animate Applied Objects

An intransitive verb such as *die* can be made transitive with the addition of an applicative morpheme. The added argument can be a benefactive, as in (7), or a goal, as in (8), or malefactive, as in (9). When the added object is animate, the object must agree.³

- (7) ku+mu+fi+il mwāan
 INF+OAGR+die+APPL child
 to die for the child (Nash 1992, p. 961)

- (8) ku+mu+ciin+in maaku
 INF+OAGR+run+APPL mother
 to run to Mother (Nash 1992, p. 961)

In fact, the presence of an applicative morpheme is not actually necessary, as long as the added argument has one of these θ -roles. In the following example, *die* has no applicative morpheme, but it does have an added argument with a malefactive role. Although Nash's example has a specific object, he states that agreement is required here regardless of specificity or focus (Nash 1992, p. 961).

- (9) ku+mu+fā mwānt
 INF+OAGR+die chief
 to die on the chief (Nash 1992, p. 961)

1.2.2 Inanimate Applied Objects

When the object that is added in association with an applicative morpheme is inanimate, it will not trigger object agreement, unless it is focused and definite/specific, just as is the case for non-applied inanimate objects.

- (10) ku+sad+in jimpāk
 INF+use+APPL knives
 to use knives (Nash 1992, p. 961)
- (11) ku+ji+sad+in jimpāk
 INF+OAGR+use+APPL knives
 to use *the knives* (Nash 1992, p. 961)

1.3 Double Object Constructions

Ditransitive constructions are somewhat different than constructions with only one

³Nash 1992 gives only examples with definite objects, although he states that definiteness makes no difference.

object. The second object never triggers agreement (although it can pronominalize using what looks like the same morpheme). The first object triggers agreement under somewhat different conditions than a single object does. Note that the behavior of double object constructions is the same whether or not an applicative morpheme is present.

1.3.1 Animate First Objects

In contrast to animate objects in transitive constructions, which must also be specific in order to trigger object agreement, an animate first object in a ditransitive construction triggers agreement, regardless of whether it is also specific (Nash 1992, p. 565). Thus the examples in (12), (13), and (14) would be ungrammatical without the object agreement morpheme.

- (12) ku+mu+ti+il muntu mupit
 INF+OAGR+set+APPL person trap
 to set a trap for a [any or particular] person (Nash 1992, p. 565)
- (13) ku+mu+bùl muntu cinkañ
 INF+OAGR+hit person fist
 to hit a [any or particular] person a fist (that is, to punch a person)
 (Nash 1992, p. 565)
- (14) ku+y+iyy antu nfałang
 INF+OAGR+steal people money
 to steal money from [any or particular] people (Nash 1992, p. 565)

Thus animate first objects of double object constructions behave like applied objects of single object verbs, regardless of whether or not an applicative morpheme is present. The reason for this parallelism between the behavior of first objects and applied objects, it will be argued, is that these arguments tend to have the same θ -roles: benefactives/malefactives and goals, but not themes.

1.3.2 Inanimate First Objects

Unlike animate first objects, inanimate first objects need not trigger agreement, although they can do so if specific and focused (Nash 1992, p. 599, 962). In the following example, the applied argument has the benefactive θ -role, but we see that a benefactive θ -role is not sufficient to produce agreement unless the object is also either animate or specific and focused.

- (15) a. ku+land+in cikumbu yitwàamu
 INF+buy+for house chairs
 to buy the house some chairs

- b. ku+ci+land+in cikumbu yitwàamu
 INF+OAGR+buy+for house chairs
 to buy *the house* some chairs (Nash 1992, p. 599)

Thus the behavior of inanimate first objects is identical to the behavior of inanimate single objects (Nash 1992, p. 962).

1.3.3 Second Objects

In ditransitive constructions, *the second object cannot agree* (Nash 1992, p. 570).

- (16) a. ku+mu+tum+in mwân malong
 INF+OAGR+send+to child plates
 to send the child the plates (where 'the child' agrees)
- b. *ka+ma+mu+tum+in mwân malong
 INF+OAGR+OAGR+send+to child plates
 to send the child the plates (where both objects agree)
 (Nash 1992, p. 570)

The ungrammaticality of (16b) is not due to the presence of the two morphemes, *ma* and *mu* together, because this sequence is perfectly grammatical if the second object is not agreeing, but rather occurring as an incorporated pronoun.⁴

- (17) ka+ma+mu+tum+in mwân
 INF+pronoun+OAGR+send+to child
 to send the child them (to send them to the child)
 (Nash 1992, p. 569)

In the examples above, however, one might assume that since the first object is animate and must agree, that this alone could be responsible for blocking agreement of the second object. In the following example, where the first object does not trigger agreement, it is still impossible for the second object to agree, as shown in (18b) (Nash p. 599).

- (18) a. ku+land+in yitwàamu cikumbu
 INF+buy+for chairs house
 to buy the chairs a house
- b. *ku+ci+land+in yitwàamu cikumbu
 INF+OAGR+buy+for chairs house
 to buy the chairs a house (where the second object agrees)

⁴The Musumban dialect of Ruwund allows this morpheme order, but other dialects require the incorporated pronoun to cliticize to the end of the verb. Object pronouns are discussed further below.

(Nash 1992, p. 599)

1.4 Pronouns

Forms that look like the object agreement morphemes are used as (incorporated) object pronouns in Ruwund. Nevertheless, the conditions on the occurrence of pronouns (which do not co-occur with full NPs) are different than the conditions on object agreement (which does involve co-occurrence with a full NP).⁵ The second object can pronominalize, even though it cannot agree.

- (19) a. ka+ma+mu+tum+in mwáan
 INF+pronoun+OAGR+send+to child
 to send the child them (Nash 1992, p. 569)
- b. *ka+ma+mu+tum+in mwáan malong
 INF+OAGR+OAGR+send+to child plates
 to send the child the plates (Nash 1992, p. 570)

In addition, although only one object can agree, both objects can be realized as (incorporated) pronouns.

- (20) ka+ma+mu+tum+in
 INF+pronoun+OAGR+send+to
 to send him them (Nash 1992, p. 570)

There is one restriction on what can be realized as an object pronoun, however. The second object cannot occur as an incorporated pronoun *unless the first object agrees or is also realized as a pronoun* (Nash 1992, p. 963).

- (21) a. ku+land+in cikumbu ulàál.
 INF+buy+APPL house bed
 to buy a bed for a/the house
- b. *ku+wu+land+in cikumbu.
 INF+PRONOUN+buy+APPL house
 to buy it for a/the house
- c. ku+wu+ci+land+in cikumbu.
 INF+PRONOUN+OAGR+buy+APPL house
 to buy it for a/the house

⁵An object pronoun can only co-occur with a full NP if the full NP has been left-dislocated to the front of the clause, as in 'The letter, the woman sent it to the chief this morning' (Nash 1992, p. 941).

- d. ku+wu+ci+land+in
INF+PRONOUN+PRONOUN+buy+APPL
to buy it for it (Nash 1992, p. 963)

2. Generalizations

Ruwund objects with a rather diverse list of properties trigger object agreement:

- (22) In single object constructions in Ruwund, object agreement is obligatorily triggered by objects that are:

1. *animate and specific*, or
2. *animate and benefactive/malefactive*, or
3. *animate and goal*, or
4. *focused and specific*

Single objects with other features cannot trigger object agreement.

- (23) In double object constructions in Ruwund, object agreement is obligatorily triggered by a first object that is:

1. *animate*, or
2. *focused and specific*

First objects with other features cannot trigger agreement.

While it initially appears that the conditions for agreement of the first object in a double object constructions are simpler than those on a single object, this is not actually true. We can unify the generalizations for single objects and for first objects, once we recognize that first objects in double object constructions have the θ -roles mentioned in the generalizations for single objects. That is, animacy alone appears to be sufficient for a first object to trigger agreement, but that is because animate first objects are always benefactives/malefactives or goals in the range of Ruwund constructions discussed here. Thus we can take the generalizations in (22) for single objects to cover first objects as well.

- (24) Second objects can never trigger agreement, regardless of their features.

If we attribute the inability of second objects to trigger agreement to a separate principle, such as Minimality (the inability of a second object to move across a first object), then we can take the generalizations in (22) to apply generally to any object in Ruwund:

(25) In Ruwund, object agreement is obligatorily triggered by any object that is:

1. *animate and specific*, or
2. *animate and benefactive/malefactive*, or
3. *animate and goal*, or
4. *focused and specific*

unless Minimality would be violated.

The generalization that describes the conditions under which an object can pronominalize are much simpler to state:

(26) Conditions on pronominalization in Ruwund:

Single objects and first objects can always pronominalize.

Second objects can pronominalize only if

1. *the first object agrees* or
2. *the first object is a pronoun*.

Let us now turn to the proposed analysis of these generalizations.

3. Analysis

We see from the generalizations stated in section two that in Ruwund, just as in Palauan (Woolford 1995), there is no one feature that is necessary or sufficient for an object to agree. Animacy clearly plays a role, but being animate alone is not sufficient. Animacy is not even required, since inanimate objects agree if they are focused and specific. The significance of this pattern is that no feature checking account of Ruwund object agreement can account for these facts. That is, one cannot answer the question of which objects will trigger agreement in Ruwund by stipulating that there is a feature or set of features that an object Case or Agr-O must have, such as [+animate], that has to be checked against those of the object.

In the analysis developed here, object agreement occurs whenever an object moves to Spec Agr-O, but not all objects move. Objects whose features match those specified by one of the highly ranked exclusion principles are prohibited from remaining in their base positions within the VP. Such objects are forced to move to Spec Agr-O in Ruwund.⁶ Objects with other features remain in the VP, prevented from moving by the economy principle Avoid Movement.

⁶Movement out of the VP is not the only strategy available in UG for avoiding violations of exclusion principles. Languages such as Palauan and Spanish use preposition insertion to place objects with the wrong features in positions not governed by V (See Woolford 1995).

In this section, the various elements of the analysis are laid out in subsections 3.1-3.4, followed by demonstrations in section 3.5 of how the analysis applies to examples of various types.

3.1 Competing Derivations

A central assumption of the analysis proposed here is that Ruwund allows an object to get Case in either of two positions: in its base position inside the VP or outside the VP in Spec Agr-O. As a result, there are two possible derivations that satisfy the Case filter for every sentence containing an object:⁷

(27) Subject [_{VP} Object

(28) Subject Object Agr-O [_{VP}

The agreement patterns of these two derivations are not the same. If the object remains inside the VP, as in (27), there can be no object agreement because there is no NP in Spec Agr-O. If the object moves to Spec Agr-O, as in (28), object agreement occurs in a Spec-head relationship with Agr-O, as in Chomsky 1995.

The odd restrictions on object agreement in Ruwund are the result of the interaction of several principles that lead the grammar to select one or the other of these two derivations under different conditions. These interacting principles include the economy principle, Avoid Movement, and several exclusion principles.⁸

3.2 Exclusion Principles

As noted in the introduction to this paper, exclusion principles exclude NPs with particular features or bundles of features from VP-internal positions. The general form of exclusion principles is as follows:

⁷It is assumed here that the word order does not indicate this difference in structural position for agreeing and non-agreeing objects, because Bantu verbs raise above Spec Agr-O at S-Structure. The reason that there are two different positions in which objects can get Case in Ruwund (it is proposed here) is because V and Agr-O only optionally have a Case feature. If a head has a Case feature, it must be checked/assigned, but if a head has no Case feature, no Case is checked/assigned. This scenario actually produces several additional derivations, but these get thrown out for violating the Case Filter (if neither head assigns Case or if the object is in the wrong position for the Case that is available) or for violating the requirement that NP Movement be from a Caseless position to a Cased position.

⁸This approach maintains the standard view that what drives movement to Spec Agr-O is a need for Case in the sense that an object that moves must leave a caseless trace. Nevertheless, there is also a sense in which this approach contradicts the standard view that *only* a need for Case can drive NP Movement. Under this approach, there are also other factors besides Case that can lead the grammar to select a derivation involving NP Movement.

(29) General Form of Exclusion Principles:

*[+feature, (+feature)] NPs in VP-internal positions governed by V,⁹

where the feature(s) specified include the high end of the relevant hierarchy
(e.g. [+specific], [+human], [+animate], etc.)

In Woolford 1995, it was shown that two such exclusion principles, interacting with economy principles, produce the complex pattern of object agreement in Palauan. In that language, any object whose features match those specified in either one of the exclusion principles below is forced to move to Spec Agr-O, triggering object agreement. Objects with other features remain inside the VP, due to economy principles, where they do not trigger agreement.

(30) Exclusion Principles Active in Palauan:

*[+specific, +singular] NPs from VP-internal positions governed by V.

*[+human] NPs from VP-internal positions governed by V.

Now let us turn to Ruwund. We have seen that there are four sets of features on objects that produce object agreement in Ruwund:

(31) Feature Bundles Associated with Object Agreement in Ruwund:

- a. [+specific, +animate]
- b. [+animate, +benefactive/malefactive]
- c. [+animate, +goal]
- d. [+specific, +focus]

The proposal is that there is an exclusion principle active in Ruwund referring to each one of these feature sets.¹⁰

⁹The phrase "governed by V" is included because exclusion principles do not affect NPs that are inside PPs.

¹⁰It might be possible to reduce this list to three if there were a more general feature such as [+affected] that referred to benefactives/malefactives and goals collectively.

(32) Exclusion Principles Active in Ruwund:

- a. *[+specific, +animate] NPs in VP-internal positions governed by V.
- b. *[+animate, +benefactive/malefactive] NPs in VP-internal positions governed by V.
- c. *[+animate, +goal] NPs in VP-internal positions governed by V.
- d. *[+specific, +focus] NPs in VP-internal positions governed by V.

Whenever an object has features that match those specified in any of these four exclusion principles, it cannot remain in its base position inside the VP. Instead, the derivation will be selected in which that object moves to Spec Agr-O and triggers object agreement. Examples of the operation of these exclusion principles are presented below in section 3.5.

The claim that this language requires four slightly different principles to drive object movement (and agreement), which cannot and should not be reduced to some one more general principle, is a claim that each of these exclusion principles can occur independently (be independently active) in other languages.¹¹ It is the family of possible exclusion principles that should enable us to account for the typological variation in conditions on object agreement in different languages.

3.3 Economy

When an object does not have features that match any of the four exclusion principles listed above, it cannot trigger object agreement. This result is produced by the operation of the economy principle Avoid Movement, which selects the derivation without object movement, and thus without object agreement.

3.4 Ranking

In order for an exclusion principle to be active in Ruwund, it must be ranked higher than the economy principle Avoid Movement. We want the grammar to reject all derivations that violate these exclusion principles but, as noted above, we want the economy principle to rule out movement otherwise.

(33) The above four active exclusion principles > Avoid Movement

¹¹There is one, important exception to this claim involving the two exclusion principles that refer to θ -roles. It should not be possible for a language to have an active exclusion principle referring to goals if the parallel principle referring to the higher roles benefactive/malefactive is not also active. Such principles should be universally ordered by the thematic hierarchy so that the principle referring to the higher θ -role should always be ordered equal to or above the one referring to the lower θ -role, goal.

Other exclusion principles available in UG, but not active in Ruwund, are ranked below Avoid Movement. As a result they never have any effect because Avoid Movement always selects the derivation without Movement before they get a chance to apply.

(34) Avoid Movement > Other, inactive exclusion principles

Since the exclusion principles never conflict (they have the same effect if more than one applies in a particular sentence), there is no way to rank them with respect to each other, based on the Ruwund data, so they will be considered here as a unranked group.¹²

There is at least one principle that ranked higher than these four active exclusion principles in Ruwund, however, and that is the Minimality Principle. Recall that second objects cannot trigger agreement, regardless of what features they have and regardless of whether or not the first object triggers agreement. Movement of the second object, over the first object, to Spec Agr-O is apparently blocked in Ruwund. Assuming the standard binary branching structure of VP in which the first object is in a Spec position higher than the second object, movement of the second object over the first will be a violation of the Minimality Principle. Since this movement is blocked in Ruwund, even when the second object has features referred to by an active exclusion principle (e.g. specific and focused), it indicates that the Minimality Principle is ranked above even the exclusion principles in this language.¹³

(35) Minimality > Active Exclusion Principles

We can now summarize this ranking information as follows:¹⁴

(36) Principle Ranking in Ruwund

Minimality > Active Exclusion > Avoid Movement > Inactive Exclusion
Principles Principles

¹²Although it makes no empirical difference for Ruwund (that I have been able to detect), the thematic hierarchy specifies a universal ranking for the exclusion rules that refer to θ -roles. That is, an exclusion rule that refers to a benefactive is always ranked higher than an exclusion rule that refers to a θ -role lower on the hierarchy, such as a goal. Thus, knowing that Ruwund has an exclusion rule that refers to goals that is ranked above Avoid Movement, it follows that all other exclusion rules referring to all θ -roles above goal on the thematic hierarchy must also be ranked above Avoid Movement in Ruwund.

¹³Minimality must itself be a violable principle of UG, however, given that the second object can move across the first in the passives of many languages (Woolford 1993).

¹⁴The assumption here, following Optimality Theory (Prince and Smolensky 1993) is that all possible exclusion rules are present in UG and the grammars of individual languages merely specify the ranking information (which will indicate which of these rules are active in the language).

3.5 Examples

Now let us examine a series of examples of how these exclusion and economy principles interact to produce the observed pattern of object agreement in Ruwund. We will begin with single object constructions, considering objects with a range of different features, then move on to double object constructions.

3.5.1 Single Object Constructions

Let us begin with ordinary transitive constructions in which the single object is a theme. As we have seen, such objects will trigger agreement if they are both animate and specific, as in (37b), but not if they are only animate, but not specific, as in (37a).

(37) a. ku + kimb muntu
 INF + look-for person
 to look for a [any] person

b. ku + mu + kimb muntu
 INF + OAGR + look-for person
 to look for a/the person (speaker has a particular person in mind)

A central claim under this analysis is that the object is not located in the same surface position in these two examples. In (37b), the fact that object agreement is triggered indicates that the object has moved to Spec Agr-O. The absence of agreement in (37a) indicates that no movement has occurred.

In fact, both derivations are potentially available for both examples. What determines which object will surface in which position in these examples is the interaction of the exclusion and economy principles that select the best derivation depending on the features of the object. When the object is animate and specific, the derivation in (a) is ruled out by the exclusion principle that bars [+animate, +specific] NPs from positions inside VP governed by V. That leaves the derivation in (b), which involves movement to Spec Agr-O and object agreement, as the only remaining derivation.¹⁵ The derivation in (b) is the best derivation, despite the fact that it violates the economy principle, Avoid Movement. Avoid Movement is irrelevant for this example because by the time Avoid Movement gets a chance to apply, there is only one candidate left. Thus the best candidate has already been identified and Avoid Movement never has a chance to have an effect on

¹⁵There is actually at least one additional candidate derivation that is in fact selected as the best derivation in imperfective constructions in Palauan. That candidate has a preposition inserted adjacent to the object, so that the object is inside of a PP and no longer governed by V. That candidate is not discussed here, but it is assumed that the reason that Ruwund does not make use of the preposition insertion strategy to avoid violations of exclusion principles is that movement is 'cheaper' than insertion in Ruwund, just as it is in perfective constructions in Palauan (Woolford 1995). That is, the economy principle Avoid Insertion is ranked above Avoid Movement.

the outcome. This competition between candidates is expressed in the tableau below.

(38) (Object is [+animate, +specific])

Candidates	*[+animate, +specific] NPs in VP-internal positions gov...	Avoid Movement
a. $_{VP}$ NP (no object agreement)	*!	
☞ b. NP Agr-O $_{VP}$ t (with object agreement)		*

When the object is not specific, that exclusion principle has no effect (does not apply). Nor do any of the other three Ruwund exclusion principles because the object is not a benefactive/malefactive or goal, nor is it focused. In that situation, there are still two candidates remaining when the economy principle applies and thus the economy principle makes the decision, ruling out the (b) derivation which involves movement.

(39) (Object is [+animate, -specific])

Candidates	*[+animate, +specific] NPs in VP-internal positions gov...	Avoid Movement
☞ a. $_{VP}$ NP (no object agreement)		
b. NP Agr-O $_{VP}$ t (with object agreement)		*!

In examples where the object is a goal, rather than a theme, the situation changes. Many familiar European languages have certain transitive verbs that take goal objects instead of themes, as one can see by the fact that such objects are marked with dative Case, rather than accusative. There are a handful of verbs in Ruwund that appear to take goal objects. These include the verbs for *help*, *marry*, and *cure* (Nash 1992, p. 960). The objects of these verbs are always animate and they always trigger object agreement, regardless of whether or not they are specific.

- (40) ku+yi+kwaash āan
 INF+OAGR+help children
 to help children (Nash 1992, p. 960)

Objects of these verbs are [+animate, +goal] and are thus subject to the exclusion principle that bars objects with these features from remaining in their base position inside the VP. Candidate (a) is eliminated because it violates this exclusion principle. Candidate (b), involving movement and object agreement, is selected as the best candidate, because it is the only remaining candidate. The lower ranked Avoid Movement never gets a chance

to influence the outcome.

(41) (Object is [+animate, +goal])

Candidates	*[+animate, +goal] NPs in VP-internal positions gov...	Avoid Movement
a. $_{VP}$ NP (no object agreement)	*!	
* b. NP Agr-O $_{VP}$ t (with object agreement)		*

3.5.1.1 Applicative Constructions

Most of the single object constructions that require object agreement in Ruwund involve applicative morphemes. Whenever an animate benefactive/malefactive or goal object is added to an intransitive verb by means of an applicative construction, object agreement is obligatory (Nash 1992, pp 960-961). The example in (42) has a benefactive object, while (43) has a goal object.

(42) ku+mu+fi+il mwáan
 INF+OAGR+die+APPL child
 to die for the child (Nash 1992, p. 961)

(43) ku+mu+ciin+in maaku
 INF+OAGR+run+APPL mother
 to run to Mother (Nash 1992, p. 961)

It is not necessary to construct an account of this fact that refers to the presence of an applicative morpheme, however. The θ -role of the added animate object is the key. The analysis of these examples is exactly the same as that of the two examples discussed just above, except that (42) is affected by the exclusion principle that refers to animate benefactives, rather than goals.

(44) (Object is [+animate, +benefactive])

Candidates	*[+animate, +benefactive] NPs in VP-internal positions gov...	Avoid Movement
a. $_{VP}$ NP (no object agreement)	*!	
* b. NP Agr-O $_{VP}$ t (with object agreement)		*

Let us now turn to examples involving the addition of an object by means of an

applicative morpheme where the applied object is neither animate nor a benefactive or goal. In such examples, there is no object agreement (unless the object is focused—a situation we deal with below).

- (45) ku + sad + in jimpàk
 INF + use + APPL knives
 to use knives (Nash 1992, p. 961)

The reason that an object with these features [-animate, +instrument] remains in its base position inside the VP, where it cannot trigger agreement, is that these features are mentioned by none of the exclusion principles that are active in Ruwund. Thus the economy principle makes the decision and the derivation without movement is selected.

- (46) (Object is [-animate, +instrument])

Candidates	'Active' Exclusion Principles	Avoid Movement
a. NP Agr-O [_{VP} t (with object agreement)		
* b. [_{VP} NP (no object agreement)		*!

The same exclusion principles will cover similar examples that lack an (overt) applicative morpheme. The example below involves the unaccusative verb *die* whose subject is a theme. This verb is used here as a transitive verb with a malefactive object. Malefactive is like benefactive, except that the effect is negative rather than positive.

- (47) ku + mu + fà mwánt
 INF + OAGR + die chief
 to die on the chief (Nash 1992, p. 961)

The fact that object agreement is obligatory with such examples, regardless of specificity or focus, follows if malefactive and benefactive are instances of the same θ -role (which we perhaps require a more general name for).

Thus we see that allowing exclusion principles to refer to the θ -role of an object allows us to unite the behavior of this series of examples, regardless of whether or not an applicative morpheme is present.

3.5.1.2 Focus

Now let us turn to examples in which focus leads to obligatory object agreement in Ruwund. Focus alone is not sufficient to force movement and object agreement in Ruwund, but a focused object always agrees if it is also specific, suggesting the operation of an

exclusion principle that refers to the combination of specificity and focus:

- (48) *[+specific, +focus] NPs in VP-internal positions governed by V.

Since inanimate objects are not affected by either of the previous two exclusion principles, which refer only to animates, an inanimate object will only trigger agreement when it is specific and focused, and thus agreement serves as an indicator that an inanimate object is focused in Ruwund.¹⁶

- (49) ku + land malong
INF + buy plates
to buy some/the plates (Nash 1992, p. 565)
- (50) ku + ma + land malong
INF + OAGR + buy plates
to buy *the* plates (Nash 1992, p. 565)

The proper derivation is selected for examples of this sort just as in the examples discussed above, except that a different exclusion principle is relevant.

3.5.2 Double Object Constructions

In examples involving double object constructions, the first object behaves as a single object does; the effects of the interaction of exclusion and economy principles on the first object are exactly the same as we have seen for single objects. The only difference is that the θ -role of the first object in a double object construction is generally a goal or benefactive, rather than a theme. As a result, first objects behave like the applied single objects discussed above, triggering agreement even when they are not specific, because of the exclusion principles that refer to animate goals and benefactives.

The special interest of double object constructions comes from the fact that second objects never trigger object agreement in Ruwund, regardless of their features and regardless of whether or not the first object agrees (and thus regardless of whether or not Spec Agr-O is empty and available as a target for movement of the second object).

- (51) a. ku + land + in yitwàamu cikumbu
INF + buy + for chairs house
to buy the chairs a house

¹⁶Presumably animate objects are also subject to this exclusion principle as well, but that fact is obscured because specific animate objects trigger agreement even when they are not focused.

- b. *ku+ci+land+in yitwàamu cikùmbu
 INF+OAGR+buy+for chairs house
 to buy the chairs a/the house/the house

The reason that second objects are immune to the effects of exclusion principles in Ruwund is due, it is proposed here, to the Minimality Principle (or some similar principle) that bars movement of the second object over the first object.¹⁷

Since it is more important to obey Minimality than to obey the exclusion principles in Ruwund, that indicates that Minimality is ranked higher than the exclusion principles in this language:

(52) Minimality > Exclusion Principles

To see how this works, consider two candidate derivations for a double object construction with two inanimate objects, the second of which is specific and focused (indicated by italics).

(53) Candidate derivations

- a. [_{VP} chairs *house*]
 b. *house* Agr-O [_{VP} chairs t]

Minimality will rule out derivation (b), involving movement, leaving the base-generated derivation (a) as the only surviving candidate (and thus, by default, the best candidate). Thus derivation (a) is the form that surfaces, even though it violates an exclusion principle.

(54) (Second object is [+specific, +focus])

Candidates	Minimality	*[+specific, +focus] NPs in VP-internal positions gov...	Avoid Movement
a. [_{VP} chairs house (no object agreement)		*	
b. house Agr-O [_{VP} chairs t (with object agreement)	*!		*

¹⁷Under the fairly standard assumption that the first object is located in some Spec position, movement of the second object over this filled specifier will be blocked by Minimality. If this is not the correct internal structure of VPs, then the correct principle is some other sort of principle that requires that the linear order of arguments be preserved. For example, there may be a faithfulness constraint requiring that the linear order of arguments conform to the thematic hierarchy, even at S-Structure. As noted above, however, whatever the correct form of the constraint is, it must be violable because the second object can move across the first in the passives of many languages (Woolford 1993).

The fact that Minimality is ranked above the exclusion principles that are active in Ruwund indicates that exclusion principles are violable and this fact provides further support for the idea that what determines whether or not a particular exclusion principle will be active in a language or in a particular construction within a language is determined by the relative ranking of that exclusion principle with respect to other principles.

3.6 Incorporated Pronouns

When objects are realized as pronouns in Ruwund, they appear as incorporated pronouns inside the verbal complex, as in (55), which look exactly like agreement morphemes, cf. (56).

- (55) ku+ma+land
 INF+PRONOUN+buy
 to buy them (Nash 1992, p. 960)

- (56) ku+ma+land malong
 INF+OAGR+buy plates
 to buy *the plates* (Nash 1992, p. 959)

From this, one might think that the same morpheme is involved in both examples, the agreement morpheme, and that object Pro Drop is possible just when agreement is possible. That is not the correct generalization, however. Pronominalization is possible in several contexts where agreement is not possible. The first object can always appear as an incorporated pronoun, regardless of its features. Thus an inanimate NP can appear as a pronoun without being focused, as in (55) above, whereas an inanimate NP cannot agree unless it is focused, as in (56). A more dramatic difference between agreement and incorporated pronouns is seen with respect to the behavior of second objects. The second object can appear as an incorporated pronoun, as in (57a), but the second object can never agree, as in (57b).

- (57) a. ka+ma+mu+tum+in mwâan
 INF+pronoun+OAGR+send+to child
 to send the child *them* (Nash 1992, p. 569)
- b. *ka+ma+mu+tum+in mwâan malong
 INF+OAGR+OAGR+send+to child plates
 to send the child *the plates* (Nash 1992, p. 570)

The only constraint on pronominalization in Ruwund is that the second object cannot pronominalize (58b) unless the first object either agrees (58c), or itself appears as an incorporated pronoun (58d). Why should this be so?

- (58) a. ku+land+in cikũmbu ulààl.
INF+buy+APPL house bed
to buy a bed for a/the house
- b. *ku+wu+land+in cikũmbu.
INF+PRONOUN+buy+APPL house
to buy it for a/the house
- c. ku+wu+ci+land+in cikũmbu.
INF+PRONOUN+OAGR+buy+APPL house
to buy it for a/the house
- d. ku+wu+ci+land+in
INF+PRONOUN+PRONOUN+buy+APPL
to buy it for it
- (Nash 1992, p. 963)

If Ruwund is like English and Chicheŵa in requiring an object to be adjacent to the verb in order for it to pronominalize (Baker 1988), then the contrast between (58b) and (58c) can be accounted for, given the syntax of these constructions proposed above. The basic idea is that the presence of the first object in (58b) intervenes between the verb and the second object, because in that example the first object never leaves its base position inside the VP. In (58c), however, the first object has moved to Spec Agr-O, as we can tell by the fact that it triggers object agreement. There is a point in that derivation at which the second object is phonologically adjacent to the verb: after the first NP has moved to Spec Agr-O, but before the verb has raised across the first NP to its final landing site in Tense.¹⁸

- (59) a. [VP V NP₁ NP₂
b. NP₁ [VP V NP₂
c. V NP₁ [VP NP₂

Thus, the constraint on pronominalization in Ruwund can be reduced to a requirement of phonological adjacency under this account.

Since it is crucial for this account of pronominalization that there be a difference in the structural position of a first object that agrees and one that does not, this account of pronominalization provides additional support for one of the central claims of this paper: that in Ruwund, only objects that agree move to Spec Agr-O.

¹⁸Even if V raises to Agr-O before the first object raises to Spec Agr-O, there will still be a point in the derivation where the verb and the second object are phonologically adjacent:

(i) NP₁ V [_{VP} NP₂

4. Conclusions

Languages such as Ruwund, in which objects with any one of several bundles of features obligatorily trigger object agreement, behave as they do for two reasons. First, such languages allow Case to be assigned/checked in two different object positions. As a result, objects may remain in situ in the VP or they may move to Spec Agr-O. Second, once the Case Filter is removed as the determining factor of object position, weaker violable principles make their presence felt. Economy principles, developed in Chomsky 1995, favor derivations without movement where the object remains in the VP and therefore cannot trigger agreement. Exclusion principles, developed in Woolford 1995, have the opposite effect. They exclude from VP-internal positions objects with features or combinations of features that are high on one of the various animacy hierarchies. Objects excluded from the VP move to Spec Agr-O where they trigger agreement.

The empirical effects of the interaction of economy and exclusion principles differ from language to language, due to cross-linguistic differences in the relative ranking of these principles. Following Prince and Smolensky 1993, exclusion principles are hypothesized to be universally available in every grammar, with the only language-specific (learned) information necessary being the relative ranking of these principles. The exclusion principles that are active in a language are those which are ranked above the economy principles.

Ruwund provides additional information about the range of features that exclusion principles can refer to, beyond that established in Woolford 1995. In addition to the animacy and specificity of an object, exclusion principles in Ruwund may refer to the thematic role of the object and whether or not it is focused. Ruwund also shows that active exclusion principles may themselves be subordinate to the minimality principle. Second objects cannot move (and thus cannot trigger agreement) because movement across the first object would violate Minimality.

Adding exclusion principles to the theory of grammar provides a way of handling the diverse animacy restrictions on object agreement reported in the typological literature within the restrictive theory of agreement of Chomsky 1995, while minimizing the need for language-specific rules.

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